CLAIMS

1. A method for the diagnosis of a single nucleotide polymorphism in CCR-2 in a human, which method comprises determining the sequence of the nucleic acid of the human at one or more of positions 2385 and 2649 in the coding sequence of the CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924, and/or
one or more of positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U95626;
and determining the status of the human by reference to polymorphism in the CCR-2 gene.

2. A method for diagnosis according to claim 1 in which the single nucleotide polymorphism is further defined as:
the single nucleotide polymorphism at position 2385 is presence of C and/or T;
the single nucleotide polymorphism at position 2649 is presence of G and/or A;
the single nucleotide polymorphism at position 40915 is presence of A and/or T;
the single nucleotide polymorphism at position 41047 is the presence or absence of an insertion of ACA;
the single nucleotide polymorphism at position 41058 is the presence of C and/or A;
the single nucleotide polymorphism at position 41507 is the presence of C and/or A;
the single nucleotide polymorphism at position 41768 is the presence of A and/or T;
the single nucleotide polymorphism at position 42401 is the presence of A and/or G;
the single nucleotide polymorphism at position 42598 is presence or absence of an insertion of T;
the single nucleotide polymorphism at position 42673 is the presence of G and/or A;
the single nucleotide polymorphism at position 42723 is the presence of C and/or A;
the single nucleotide polymorphism at position 42874 is the presence of A and/or G; and
the single nucleotide polymorphism at position 43018 is the presence of A and/or T.

3. A method for diagnosis according to claim 1 or 2 in which the sequence is determined by a method selected from amplification refractory mutation system and restriction fragment length polymorphism.

4. A nucleotide sequence comprising a human CCR2 gene or its complementary strand or an antisense sequence thereof comprising a polymorphism at one or more of:
positions 2385 and 2649 as defined by the positions in EMBL ACCESSION NO. U 80924 and in which there is a T at position 2385 and an A at position 2649; or
positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U95626 and in which there is a T at position 40915, an insertion of ACA at position 41047, an A at position 41058, an A at position 41507, a T at position 41768, a G at 42401, the insertion of a T at position 42598, an A at position 42673, an A at position 42723, a G at position 42874 and a T at position 43018;
or a fragment thereof of at least 20 bases comprising at least one polymorphism.

5. An allele specific primer capable of detecting a CCR-2 gene polymorphism at one or more of positions 2385 and 2649 in the CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924 and/or
one or more positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U95626.

6. An allele-specific oligonucleotide probe capable of detecting a CCR-2 gene polymorphism at one or more of positions 2385 and 2649 in the CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924, and/or
one or more positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U95626.

7. A diagnostic kit comprising an allele-specific primer as defined in claim 5 or an allele-specific oligonucleotide probe as defined in claim 6.

8. A method of treating a human in need of treatment with a CCR-2 ligand antagonist drug in which the method comprises:

i) diagnosis of a single nucleotide polymorphism in CCR-2 gene in the human, which diagnosis comprises determining the sequence of the nucleic acid at one or more of positions

2385 and 2649 in the CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924, and/or

at one or more of positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U 95626,

and determining the status of the human by reference to polymorphism in the CCR-2 gene; and

ii) administering an effective amount of a CCR-2 ligand antagonist .

9. Use of a CCR-2 ligand antagonist drug in preparation of a medicament for treating a CCR-2 ligand mediated disease in a human diagnosed as having a single nucleotide polymorphism at one or more of positions 2385 and 2649 in CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924, and/or

at one or more positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U 95626.

10. A pharmaceutical pack comprising a CCR-2 ligand antagonist drug and instructions for administration of the drug to humans diagnostically tested for a single nucleotide polymorphism at one or more of positions 2385 and 2649 in the CCR-2 gene as defined by the positions in EMBL ACCESSION NO. U 80924 and/or

at one or more positions 40915, 41047, 41058, 41507, 41768, 42401, 42598, 42673, 42723, 42874 and 43018 in the promoter sequence of the CCR-2 gene as defined by the positions in the EMBL ACCESSION NO. U95626.

11. A computer readable medium comprising at least one nucleotide sequence as defined in claim 4 stored on the medium.